

Musci novi papuani.

Descripsit

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Fissidens (Eufissidens) Kaernbachii Broth.; autoicus; gregarius gracilis, viridis, haud nitidus; caulis ad 5 mm usque altus, infima basi radiculosus, radiculis longis, fuscis, dense foliosus, superne cum foliis 4,5 mm latus, simplex; folia usque ad 12-juga, patentia, homomalla inferiora minora, superiora usque ad 1 mm longa, oblongo-lanceolata, acuta minutissime crenulata, haud limbata, lamina vera lamina apicali paulum longior, lamina dorsalis ad basim nervi enata, nervo lutescente, flexuosulo infra summum apicem evanido, cellulis minutis, obscuris, rotundato-hexagonis, 0,007 mm diam., valde papillosis; seta terminalis, 3 mm alta, basi genuflexa erecta, superne cygnea, ubique scaberula, rubra; theca horizontalis, minuta, ovalis, deoperculata sub ore paulum constricta pallida, laevissima; peristomium simplex, dentibus 16, sanguineis ultra medium in cruribus duobus, filiformibus, papillosis fissis; operculum alte conicum, oblique acuminatum; calyptra cucullata, operculum obtegens; perigonium gemmiforme, axillare, bracteis paucis.

Nova Guinea, ad corticem arboris, Gogolexpedition (L. KAERNBACH).

Ex affinitate *F. lagenarii* Mitt. et *F. scabriseti* Mitt. Ab hoc foliis haud limbatis, a illo nervo foliorum infra summum apicem evanido nec non seta scabriuscula recedit.

Arthrocnemum subdentatus Broth.; dioicus; gracilis, caespitosus caespitibus densiusculis, rigidis, viridi-albescentibus, haud nitidis; caulis ad 4 cm usque altus, adscendens, usque ad apicem radiculosus, radiculis longis, atro-purpureis, e basi dense foliosus, simplex vel superne ramosus folia apice saepe radicantia, indistincte trifaria, e basi adpressa hyalina elongate oblonga patenti-recurva, sensim lineari-ligulata, obtusa, 5 mm longa, integerrima, summo apice tantum multidenticulata, angustissima limbata, enervia, areolatione in tota parte superiore, ut etiam in medio baseos parte, multistratosa, cellulis superne rotundato-hexagonis, inferne rectangularibus, in baseos alis autem unistratosa, tenera, cellulis rectangularibus. Caetera ignota.

Nova Guinea, Butaueng et in insula Uole (L. KAERNBACH).

Ab *A. dentato* (Mitt.) C.-Müll. simillimo foliis lineari-ligulatis, obtusis, minutius denticulatis differt.

Leucophanes (Trachynotus) subscabrum Broth.; gracile, laxe caespitosum, caespitibus humilibus, albidis, haud nitidis; caulis vix ultra 5 cm altus, adscendens, basi longe radiculosus, e basi dense foliosus, implex; folia e basi adpressa, elongate oblonga, subvaginante, hyalina et subulam patulam, anguste lanceolatam producta, obtusa, 3 mm longa, limbata, limbo basilari distincto, angusto, superne denticulis aculeiformibus ciliato, laminali indistincto, minute serrulato, nervo lato, crasso, subulam fere totam occupante, in tota parte laminali scaberrimo, cellulis basilaribus hyalinis, teneris, rectangularibus, superioribus quadratis. Aeterea ignota.

Nova Guinea, Butaueng (L. KAERNBACH).

A *L. scabro* (Mitt.) C. Müll. valde affini foliis obtusis, minutius denticulatis setulis et nervi humilioribus differt.

Diese Art verhält sich zu *L. scabrum* genau wie *Arthrocormus subdentatus* zu *dentatus*.

Calymperes Kaernbachii Broth.; dioicum; caespitosum, caespitibus parvis, humilibus, lutescenti-viridibus; caulis ad 8 mm usque altus, erectus, apice incurvatus, infima basi radiculosus, densiuscule foliosus, implex; folia sicca incurva, marginibus involutis, humida mollia, spatulata, e basi angustiore, semiamplexicauli elongate oblonga vel spatulato-oblonga, obtusa, ca. 2,5 mm longa et 0,57—0,66 mm lata, marginibus rectis, haud undulatis, integerrimis, haud limbata, nervo crasso, superne humilior, infra summum apicem evanido, vel excedente, superne dilatato, scaberrimo, subindeque filamentis confervoideis, fusiformibus, multiseptatis, fasciculatim obsesso, cellulis basilaribus interioribus laxis, subquadratis, parvis, laevissimis, marginalibus pluriseriatis, multo minoribus, quadratis, laevissimis, marginalibus pluriseriatis, multo minoribus, quadratis, laevissimis, laminalibus minutis, rotundatis, chlorophyllosis, papillosis. Aeterea ignota.

Nova Guinea, in insula Uole (L. KAERNBACH).

A *C. Dozyano* Mitt., proximo, nervo superne scaberrimo nec non marginibus et cellulis basilaribus folii integerrimis differt.

Splachnobryum Novae Guineae Broth.; dioicum; caespitosum, caespitibus densiusculis, sordide viridibus, nitidiusculis; caulis ad 7 mm usque altus, erectus, basi parce radiculosus, inferne laxe, superne densiuscule foliosus, crassiusculus, strictus, rubens, simplex; folia pellucida, subplanata, subplana, elongate oblonga, rotundato-obtusa, 4,5—4,75 mm longa et 0,47—0,51 mm lata, marginibus e basi ad medium folii vel apicem ultra revolutis, apice ob cellulas prominentes minutissime serrulatis, nervo crassiusculo, infra apicem evanido, laevissimo, cellulis elongatis, pedicelli folii 0,125—0,149 mm longis et 0,015 mm latis, apicalibus tantum

brevioribus, omnibus laevissimis, parce chlorophyllosis; bracteae perichaetii foliis simillimae; seta 8 mm alta, erecta, tenuissima, sicca dextrorsum torta, pallide rubra, nitidiuscula, laevissima; theca erecta, plerumque arcuatula, asymmetrica, anguste cylindrica, 1,5 mm alta, sicca laevis, nitidiuscula, sub ore haud constricta, pallide fusca, ore rubiginosa, leptodermis. Caetera ignota.

Nova Guinea, Butaueng (L. KAERNBACH).

Species optima, foliorum forma et areolatione a ceteris speciebus generis facillime distinguenda.

Hookeria (Callicostella) pterygophylloides Broth.; synoica; valde complanata, cortice adpressa, cum foliis 2 mm lata, pallide glauca, vernicoso-nitidiuscula; caulis repens, per totam longitudinem hic illic radicans, radiculis fasciculatis, longis, fuscis, pinnatim ramosus, ramis patentissimis, ad 7 mm usque longis, paulum declinatis, obtusis; folia sicca haud mutata, pellucida, laevissima, lateralia patentissima, asymmetrica, oblonga, truncata, brevissime obtuse acuminata, marginibus erectis, e medio ad apicem serrulatis, haud limbata, nervis binis, distinctissimis, pallidis, e basi jam divergentibus, infra summum apicem abruptis, dorso superne remote denticulatis, cellulis laxis, rotundato-polygonis 0,020—0,025 mm longis et 0,015 mm latis, basilaribus longioribus, omnibus parce chlorophyllosis, laevissimis, intermedia minora, adpressa, ovalia et ovali-ovata; bracteae perichaetii erectae, ovato-lanceolatae, minus serrulatae; seta 12 mm alta, erecta, strictiuscula, basi c. 0,2 mm crassa, purpurea, haud nitida, apice scabra; theca horizontalis, ovalis, brevicollis, cum collo c. 1,5 mm alta et c. 0,6 mm crassa, sub ore haud constricta, atropurpurea, nitidiuscula; peristomium normale; operculum rostratum, rostro recto, theca brevior; calyptra sordide pallida, multoties laciniata, apice scabra.

Nova Guinea, Gogolexpedition (L. KAERNBACH).

Species pulcherrima, habitu pterygophylloideo primo visu distinguenda.

Thuidium subbifarium Broth.; dioicum; caespitosum, caespitibus laxis, laete viridibus, rigidiusculis; caulis elongatus, reptans, interrupte radiculis substrato adfixus et alternatim arcuatim assurgens, divisionibus bipinnatis, pinnis vix ultra 6 mm longis, strictiusculis, pinnulis brevissimis, strictis, complanatis; folia caulina remota, patula, e basi dilatata, subcordata triangularia, in subulam longissimam, piliformem, articulata attenuata, marginibus basi revolutis, superne ob cellulas prominentes minutissime crenulatis, nervo viridi, in basi acuminis desinente, cellulis minutis, rotundatis, pellucidis, minute papillosis, ramulina disticha, patula, subplana, oblonga, acuta, marginibus crenulatis, nervo pallido, infra apicem desinente, cellulis minutis, rotundis, papillosis, obscuris, paraphyllia numerosa, simplicia vel ramosa. Caetera ignota.

Nova Guinea, Gogolexpedition (L. KAERNBACH).

A *Th. bifario* Br. Jav. simillimo statura robustiore cellulisque foliorum ramulinorum obscuris, minoribus differt.

Diese Art steht freilich dem *Th. bifarium* sehr nahe, unterscheidet sich doch durch kleinere, undurchsichtige Blattzellen. Wahrscheinlich werden sich neue Merkmale bei reifere Exemplaren finden.

Th. pelekioides Broth.; autoicum; caespitosum, caespitibus depressis, densis, glaucescenti-viridibus, aetate fusciscentibus; caulis elongatus, reptans, interrupte radiculis substrato adfixus et alternatim arcuatim surgens, divisionibus dense bipinnatis, pinnis vix ultra 6 mm longis, vix recurvatis, pinnulis densis, subaequalibus, brevissimis, strictis, complanatis; folia caulina remota, e basi erecta patula, latissime subcordato-triangularia, longe acuminata, marginibus e basi usque supra medium revolutis, integerrimis vel valde indistincte crenulatis, nervo viridi, in parte superiore cum minis evanido, cellulis pellucidis, parce papillosis, minutis, rotundatis, ramulina disticha, patentia, ovata, obtusiuscula, marginibus ubique crenulatis, nervo pallido, infra apicem evanido, cellulis pellucidis, dorso grosse papillosis, rotundatis; bracteae perichaetii albae, patentia, e basi truncata sensim longe lanceolato-subulatae, integrae, nervo crassiusculo, infuscescente, piliformiter excedente, cellulis elongatis, laevissimis; seta ad 5 cm usque alta, basi geniculata, flexuosa, basi 0,48 mm crassa, pallide rubra, ubique scaberrima; theca horizontalis, deoperculata subpendula, asymmetrica, ovalis, collo sporangio subaequilongo, fusca, laevissima; peristomium duplex; exostomii dentes lanceolato-subulati. c. 0,4 mm longi et 0,6 mm lati, lutei, densissime striolati, dense et alte lamellati, theca media exarati, apice hyalini, papilloso; processus endostomii dentibus subaequilongi, carinati, anguste perforati, papilloso, cilia bina, in uno alata, elongata, hyalina, papillosa; spori 0,009—0,040 mm, obscure nigrescentes, laeves; operculum rostratum, rostro thecae fere longitudinis; calyptra cucullata, alba, laevissima.

Nova Guinea, Gogolexpedition (L. KAERNBACH).

Hypnum (Rhynchostegium) fissidentoides Broth.; dioicum? prostratum, valde complanatum, laete viride, nitidiusculum; caulis per totam longitudinem substrato adpressus, dense pinnatim ramosus, ramis pale complanatis, cum foliis 2 mm latis, vix ultra 3 mm longis, strictis, dense foliosis, obtusis; folia disticha, sicca vix mutata, patula, planiuscula, elongate lanceolata, longe acuminata, acumine subinde torto, c. 4,2 mm longa et c. 0,28 mm lata, marginibus erectis, ubique serrulatis, nervo viridi, ad vel ultra medium evanido, cellulis elongatis, utrinque acuminatis, parce chlorophyllosis, laevissimis; bracteae perichaetii e basi submarginante longe acuminatae, remote denticulatae, pellucidae, enerves; seta brevis, 5 mm alta, pallide rubra, laevissima; theca cernua, ovalis, obscuriuscula, laevis; peristomium normale; operculum ignotum.

Nova Guinea, ad corticem arboris, Gogolexpedition (L. KAERNBACH).

Trichosteleum (Sigmatella) Kaernbachii Broth.; autoicum; tenellum, caespitosum, caespitibus densis, depressis, cortici adnatis, sordide viridibus, aetate lutescenti-viridibus, haud nitidis; caulis per totam longitudinem repens, dense et regulariter pinnatus, ramis valde complanatis, cum foliis 4 mm latis, brevissimis, vix ultra 3 mm longis, patentissimis, rectis, obtusis, dense foliosis; folia disticha, patula, concaviuscula, ovato-lanceolata, breviter acuminata, c. 0,66 mm longa et c. 0,22 mm lata, marginibus erectis, ubique serrulatis, enervia, cellulis linearibus, flexuosis, dense seriatim papillois, basilaribus brevioribus et laxioribus, alaribus vix distinctis; bracteae perichaetii e basi vaginante loriformi-attenuatae, pellucidae, haud papillosae, laxius reticulatae, subintegrae; seta 6 mm alta, erecta, strictiuscula, tenuis, rubra, laevissima; theca horizontalis, minuta, brevissime ovalis, brevicollis, macrostoma, basi subtuberculosa, haud nitida, fusca; peristomium duplex; exostomii dentes lutescentes, lanceolato-acuminati, 0,25 mm longi et 0,05 mm lati, densissime striolati, dense et altissime lamellati, linea media notati, papillois, apice albidi et scabridi; endostomium sordide flavidulum, papillosum, ciliis singulis. Caetera ignota.

Nova Guinea, Gogolexpedition (L. KAERNBACH).

A *T. isoclado* (Br. Jav.), proximo, statura multo minore, foliis brevius acuminatis, serrulatis nec non cellulis alaribus vix ullis differt.

Etropothecium tophigerum Broth.; gracile, complanatum, caespitosum, caespitibus extensis, laete viridibus, nitidis, basi topha calcarea obrutis; caulis elongatus, flexuosus, parce radiculosus, dense foliosus, regulariter pinnatus, ramis complanatis, cum foliis 4—4,5 mm latis, 5—7 mm longis, arcuatulis, dense foliosis; folia disticha, vix subsecunda, patentia, ovato-lanceolata, plus minusve longe acuminata, marginibus erectis, ubique serrulatis, enervia, cellulis laxe prosenchymaticis, rhomboideis, medii folii 0,05—0,06 mm longis et 0,007—0,008 mm latis, parce chlorophyllosis, laevissimis; bracteae perichaetii e basi late vaginante in subulam longissimam, reflexam, integerrimam subito contractae; seta 2,5 cm alta, flexuosa, rubra, laevissima; theca nutans, ovato-urceolata, sub ore haud constricta. Caetera ignota.

Nova Guinea, Butaueng (L. KAERNBACH).

Ab *E. reticulato* (Doz. Molk.), cui ob areolationem simillimam sit comparandum, foliis serrulatis, brevius et latius acuminatis prima scrutatione distinguitur.

Etropothecium loricatifolium (C.-Müll.) Broth. — Syn. *Hypnum (Vesicularia) loricatifolium* C.-Müll. in litt. Autoicum; planissimum, cortici adpressum, pallide viride, vernicoso-nitidum; caulis crassus, elongatus, flexuosus, per totam longitudinem radiculosus, dense foliosus, dense et regulariter pinnatus, ramis valde complanatis, cum foliis 2—3 mm latis, 6—10 mm longis, dense foliosis, arcuatulis, obtusis; folia disticha, patula, firma, sicca haud mutata nec introrsum inflectentia, caviuscula, asym-

metrica, ovato-ovalia, obtusiuscula vel apiculo brevissimo terminata, marginibus erectis, apice serrulatis, enervia, cellulis firmis elongate et laxe rhomboideis, parce chlorophyllosis, laevissimis; bracteae perichaetii basi convolutae longe acuminatae, parce denticulatae vel subintegrae; theca 2,5 cm alta, crassiuscula, flexuosula, pallide rubra, laevissima; theca mutans, breviter ovalis, fuscidula, vix nitida laevis; peristomium E. innectentis; operculum breviter conicum.

Nova Guinea, Gogolexpedition (L. KAERNBACH).

Species pulehrrima, ab *E. infectante* (Brid.) foliis firmis, siccis immutatis nec innectentibus, ovato-ovalibus, obtusiusculis vel apiculo brevissimo terminatis nec non operculo conico optime diversa.

Etropothecium plano-fallatulum Broth.; antoicum; caespitosum, caespitibus densiusculis, depressis, pallide lutescenti-viridibus, nitidis; caulis repens, per totam longitudinem radiculosus, dense foliosus, dense regulariter pinnatus, namis dorso applanatis, 2—5 mm longis, strictis, dense foliosis; folia falcata, concaviuscula, ovato-lanceolata, anguste acuminata, marginibus erectis, ubique denticulatis, cellulis elongatis, angustissimis, basilaribus infimis brevioribus et laxioribus, omnibus laevissimis, nervis brevissimis, binis, lutescentibus vel obsoletis; bracteae perichaetii externae minores, ovato-acuminatae, internae majores, e basi marginante longe acuminatae, subintegrae vel parce denticulatae, enervas; theca 12 mm alta, flexuosula, basi 0,42 mm crassa, pallide rubra, laevissima. cetera ignota.

Nova Guinea, ad corticem arborum, Gogolexpedition (L. KAERNBACH).

Species *E. sodali* (Sull.) Mitt. affinis, sed paulum robustior, rigidior, ramis magis applanatis.

Die Originale der oben beschriebenen Arten befinden sich im Königl. botan. Museum zu Berlin.
